

REMARKS

The Office Action dated November 8, 2005 has been carefully considered. Claims 1, 2, 4, 7-12, 31, and 32 are pending. The above amendments and the following remarks are presented in a sincere attempt to place this Application in condition for allowance. Claims 1, 31, and 32 have been amended, and Claims 3 and 29 have been cancelled in this Response. Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Applicants wish to thank the Examiner for the courtesy of the interview conducted on February 2, 2006. During the interview, the above-referenced amendments were discussed.

Claims 1-4, 7-12, 31 and 32 stand rejected under 35 U.S.C. § 103(a) by U.S. Patent 6,141,245 by Bertin et al. ("Bertin") in view of U.S. Patent 6,927,957 by Bakulin et al. ("Bakulin"). Insofar as these rejections may be applied against the Claims, they are traversed and should be deemed overcome. Claim 3 has been cancelled in this Response and, therefore, the rejection of Claim 3 is moot.

Regarding Claim 1, Bertin was cited as assertedly fully disclosing the following:

(1) "a system for de-coupling a capacitive path (30) from an IO pad (25) and a protected component (20)" (*citing* Bertin, items 20, 25, 30);

(2) "wherein a first circuit (50) is a fuse (for Claim 3)" (*citing* Bertin, item 50);

(3) "and a second circuit (55) (fuse blow pad for Claim 4) able to cause the first circuit to cease conducting in response to variations in voltage or current" (*citing* Bertin, item 55);

(4) "wherein a node is coupled to the first circuit (between (55) and (30))" (*citing* Bertin, items 30, 55);

(5) “and a capacitive path (30) is decoupled from the IO pad and protected component (20) in response to the first circuit (50) ceasing to conduct.” Office Action, Pages 2-3 (*citing* Bertin, items 20, 30, 50; col. 4, lines 19-44).

The Examiner admits that Bertin does “not appear to disclose details about the protective device (30) except that it is commonly known in the art.” Office Action, Page 3 (*citing* Bertin, col. 4, lines 27-31). Bakulin was cited as assertedly fully disclosing that “commonly known protective devices are diodes.” Office Action, Page 3 (*citing* Bakulin, items 108, 110). The Examiner further stated that it would be obvious “to use the known diodes of Bakulin et al. as the commonly known protective device of Bertin et al. as a means to protect the protected component from both positive and negative transients arriving at the IO pad, before the device was mounted in a [printed circuit board] or system, and therefore, less susceptible to [electrostatic discharge] events, thus resulting in a more reliable product.” Office Action, Page 3.

Claim 1 has been amended to include a distinguishing feature of the present invention. In particular, Claim 1, as amended, recites, “a first circuit directly connected to the IO pad and the protected component, *wherein the first circuit comprises a fuse*” and “a capacitive path that is decoupled from the IO pad and protected component in response to the first circuit ceasing to conduct, and *wherein the fuse is blown by a laser*.” (Emphasis added). Support for this amendment can be found, among other places, at Page 7, lines 1-7, of the original Application.

Bertin does not teach, suggest, or disclose these features of the present invention. In fact, Bertin affirmatively teaches away from employing laser fuses. Specifically, Bertin states:

Finally, as prior art laser fuse devices must be blown at the wafer level prior to packaging and module burn-in, stresses may be introduced onto the chip that can promote circuit fails and performance anomalies. Laser fuses cannot be blown after circuit encapsulation and, therefore, cannot be used to correct circuit problems introduced during final module build. Thus, it would be highly desirable to provide a novel electrical fuse device, that enables

circuit binning and repair to be accomplished after chip encapsulation which serves to enhance over all product yield.

Bertin, col. 1, lines 54-63.

Further, the embodiments disclosed in Bertin emphasize the use of a thin metal strip or wire instead of a laser fuse. The arguments expressed in Bertin for a thin metal fuse (and therefore against a laser fuse) are found, among other places, in column 6, lines 5-53 (describing the physical advantages and properties of a thin metal fuse) and column 7, lines 7-29 (describing details of Bertin's thin metal fuse).

In view of the foregoing, it is apparent that the cited reference does not disclose, teach, or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is both clearly and precisely distinguishable over the cited reference in a patentable sense, and is therefore allowable. Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103(a) under Bertin in view of Bakulin be withdrawn and that amended Claim 1 be allowed.

Claims 2, 4 and 7-12 depend upon and further limit amended Claim 1. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 2, 4 and 7-12 also be withdrawn and that Claims 2, 4 and 7-12 also be allowed.

Claim 31 has been amended to include a distinguishing feature of the present invention. In particular, Claim 31, as amended, recites, "directly connecting a first circuit to the IO pad and the protected component, wherein the first circuit *comprises a fuse*" and "*wherein the fuse is blown by a laser.*" (Emphasis added). Support for this amendment can be found, among other places, at Page 7, lines 1-7, of the original Application.

Claim 32 has been amended to include a distinguishing feature of the present invention. In particular, Claim 32, as amended, recites, “a first circuit comprising a fuse directly connected to the IO pad and the protected component, *wherein the fuse is blown by a laser.*” (Emphasis added). Support for this amendment can be found, among other places, at Page 7, lines 1-7, of the original Application.

Applicants contend that the rejections of amended Claims 31 and 32 are overcome for at least some of the reasons that the rejection of Claim 1 as amended is overcome. These reasons include Bertin affirmatively teaching away from implementing laser fuses. Applicants therefore respectfully submit that amended Claims 31 and 32 are clearly and precisely distinguishable over the cited references in any combination. Accordingly, Applicants respectfully request that the rejections of Claims 31 and 32 be withdrawn and that Claims 31 and 32 be allowed.

Claim 29 stands rejected under 35 U.S.C. § 103(a) over Bertin in view of Bakulin and further in view U.S. Patent 6,621,260 by Eldridge et al. (“Eldridge”). Claim 29 has been cancelled in this response and, therefore, this rejection is moot. However, in making this rejection, the Examiner stated, “It would have been obvious to implement the laser as a means for fuse blowing so as to avoid having to apply a voltage source to each IO pad needing its associated fuse blown, thereby easing the process especially if a large number of fuses needed to be selectively blown.” Office Action, Page 4.

In light of the foregoing remarks regarding the amendments to Claim 1, Applicants respectfully submit that not only is the Examiner’s position not obvious, Bertin affirmatively teaches away from implementing a laser to blow the Bertin fuses. Therefore, as described above, this rejection is as ineffective as to Claims 1, 31, and 32 as it is moot as to cancelled Claim 29.

Accordingly, insofar as this rejection may be applied against any of the Claims, it is traversed and should be deemed overcome.

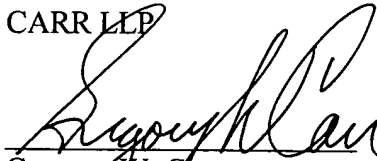
Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1, 2, 4, 7-12, 31, and 32.

Applicants do not believe that any fees are due; however, in the event that any fees are due, the Commissioner is hereby authorized to charge any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

CARR LLP


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